

# The Role of Monitoring Councils in America's Water Programs



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# The Growing Role of Monitoring



- Program direction beyond technology-based controls
- Evolving ways water quality is defined
  - Biological indicators, Multiple sources of pollution
  - Invasive species
  - Permanent, insidious degradation (PCBs, Mercury)
  - Sustainability

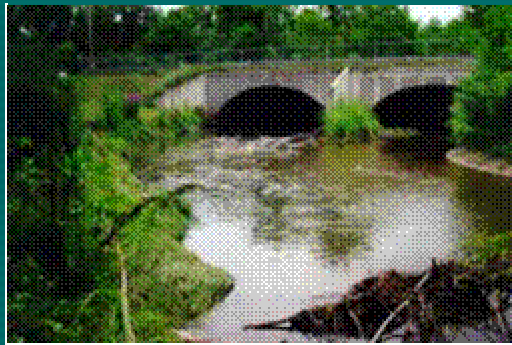
# Recent Reports Note the Importance of Information

- National Academy of Public Administration, 2002
  - Improved water quality monitoring information is necessary to help states make more effective use of limited resources
- Heinz Center Report, 2002
  - There is inadequate data for national reporting on fresh water, coastal and ocean water quality indicators.
- Draft Report on the Environment, 2003
  - No current way to define water quality on a national basis
- Pew Ocean Commission
- U.S. Commission on Ocean Policy
- GAO Reports

# Recent Assessments of Water Monitoring Programs

- **General Accounting Office**
  - EPA and States cannot make statistically valid inferences about water quality and lack data to support management decisions (2000)
  - Monitoring agencies
    - Inadequately coordinate
    - Often Do not share data
    - Too often do not use electronic data storage (2004)
- **Office of Management and Budget**
- **ASIWPCA Survey** of state monitoring programs in 2002 and found
  - 40 States and 2 Interstate agencies spend \$170 Million annually
  - These agencies need \$150 Million **MORE** annually

# The Growing Role of State Monitoring Councils in America's Water Programs

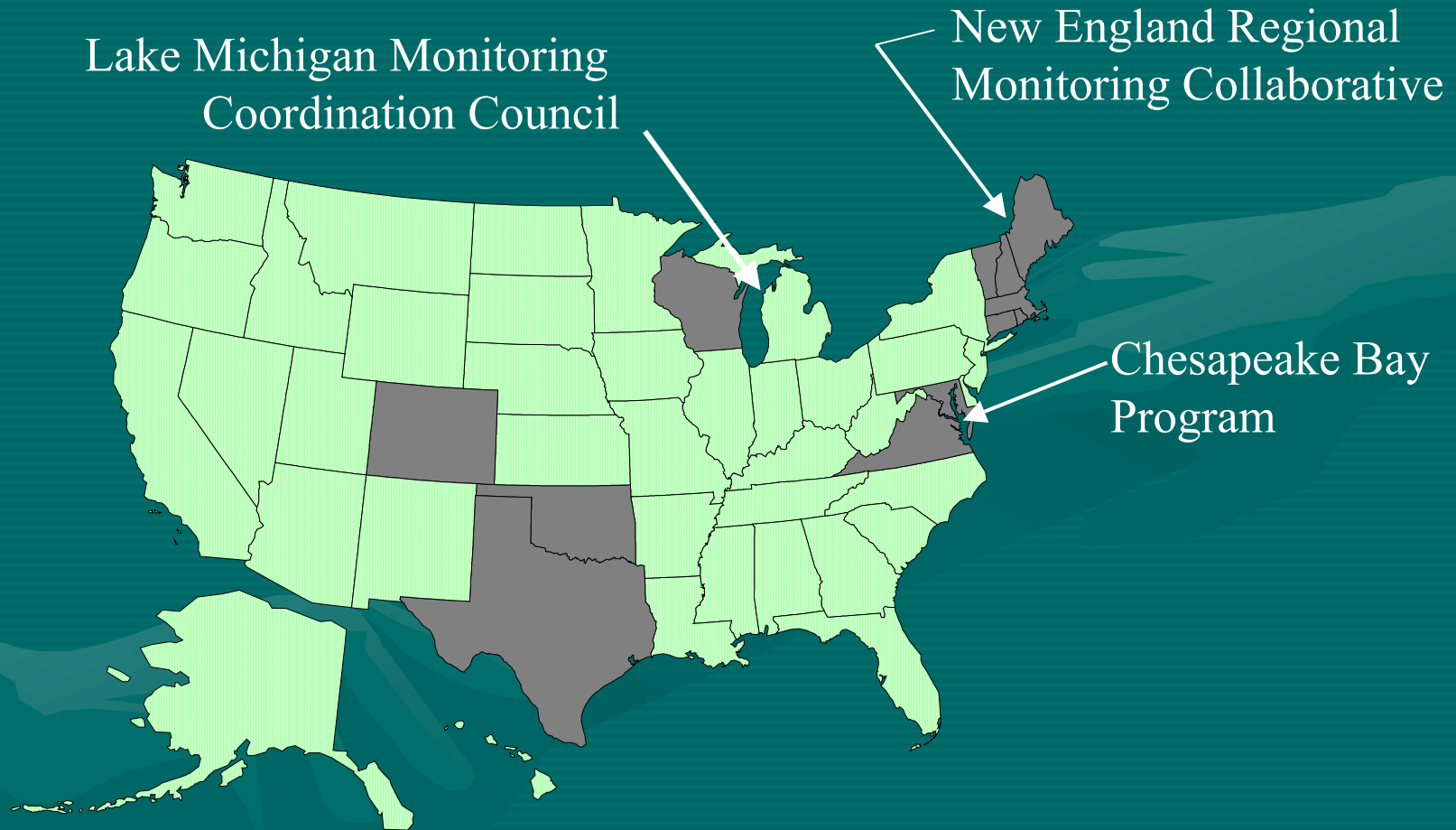


- What are they?
- Where are they?
- What do they do?
- Why helping them can improve monitoring

# What are Monitoring Councils ?

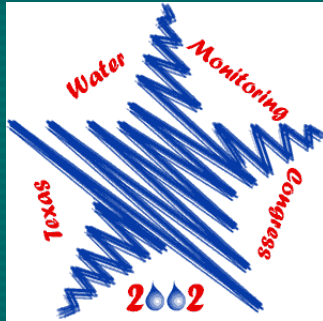
- They don't follow predictable formats
- They are monitoring staff that meet to discuss and coordinate monitoring statewide or waterbody-wide
- They are formally chartered to coordinate monitoring
- They meet regularly
- They undertake collaborative projects

# States with Monitoring Councils





# Monitoring Councils



**Lake Michigan Monitoring Coordination Council**

**MARYLAND WATER MONITORING COUNCIL**

*Wisconsin Groundwater Coordinating Council*



# Other Coordinating Mechanisms

- USGS NAWQA Committees
- ORSANCO, SRBC
- Washington Monitoring Oversight Committee
- SCCWRP
- Oregon Plan for Salmon and Watershed Monitoring
- “Gulfwatch” to monitor toxics in the Gulf of Maine
- Upper Great Lakes Connecting Channel Monitoring Committee
- Connecticut River Forum
- Technical Committees
  - Minnesota
  - Missouri
  - Alabama

# Why Monitoring Councils?

Many agencies monitor, and they need to be coordinated

- Pollution control agencies
- Health departments
- Natural resource departments
- State chartered utilities
- Local governments
- Universities
- Volunteer monitors
- Federal resource managers

# Why Monitoring Councils?

Many agencies, and they need to be coordinated

- Ohio: 42 organizations,  
88 monitoring programs
- Colorado: 48 organizations,  
115 monitoring programs

# Why Monitoring Councils?

- **Monitoring is institutionally complex**
  - Budgets are usually separate
  - There are benefits to coordinating work done separately
- **Monitoring is technically complex**
  - Field and lab methods are seldom coordinated between agencies
  - There is huge benefit to sharing expertise
- **There are savings from re-using data**
  - Comparable data comes from field and lab studies that are coordinated between agencies

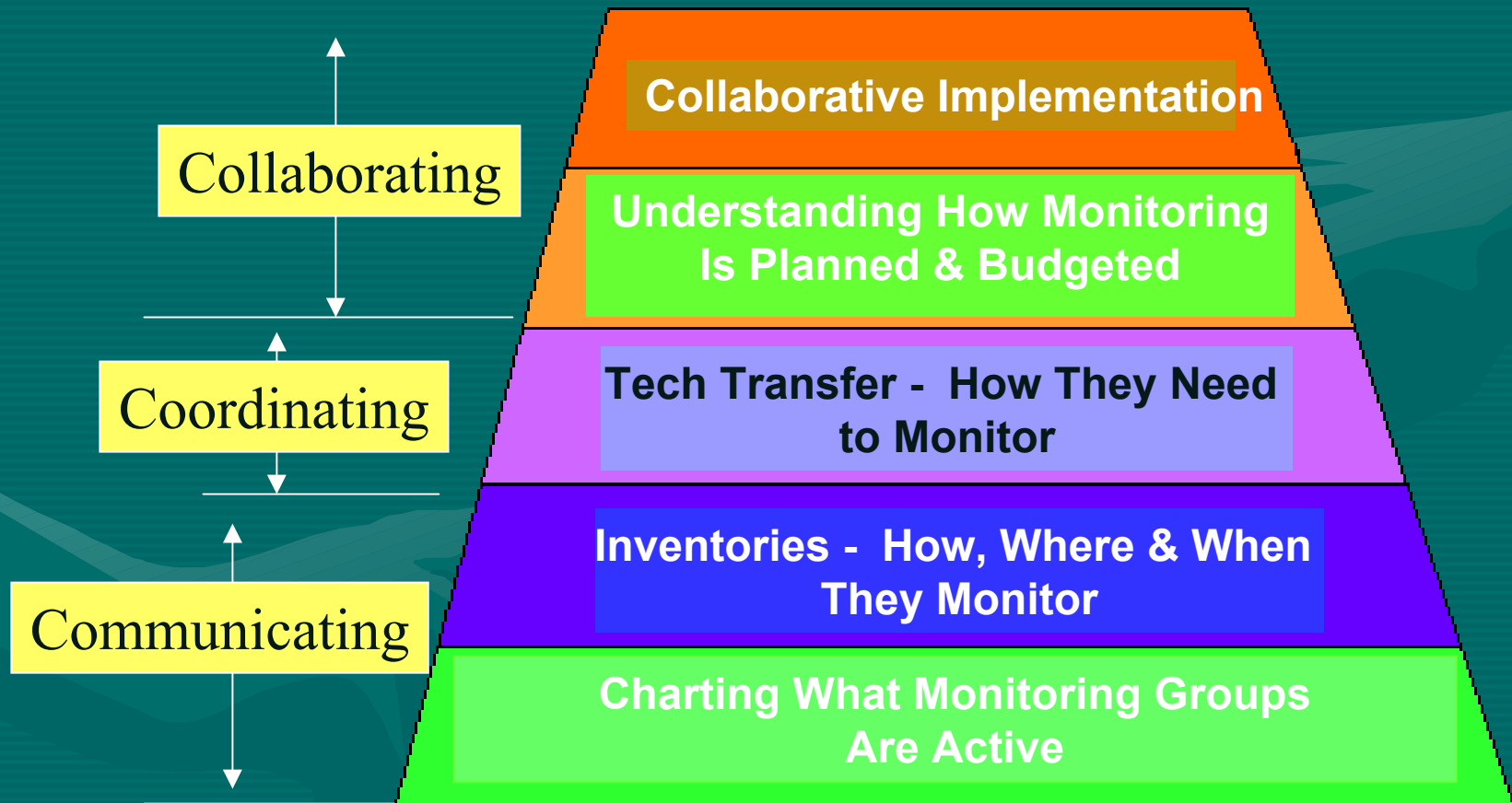
# Benefits of Monitoring Councils

- Monitoring Councils help monitoring
  - Facilitated information flows
  - Set expectations of comparability
  - Provide training
- Monitoring Councils help watersheds
  - The local need to manage resources inspires coordination by the agencies that monitor water quality there

# What Councils Do

- Increased communication and collaboration
  - Facilitated information flows
    - Conferences, websites, newsletters
    - Inventories of monitoring activity
  - Set Expectations of comparability
    - Metadata swaps to illustrate its value
    - Method comparisons, sample splitting
  - Training
  - Penetrate into the world of local government and volunteer monitors

# Monitoring Councils Hierarchy of Needs





# Monitoring Council Needs

- Councils need a Lead agency
  - it takes a few good people with the personal motivation and commitment to keep the Council active
- Monitoring Councils must meet all member needs
  - Lead agency, the other members
- Need a resource stewardship focus
- Need to be recognized

# Are All Councils Successful ?

- Most are
- Maryland holds its 10<sup>th</sup> annual conference
- Texas is planning its 5<sup>th</sup> monitoring Congress next year
- Montana's council folded

# Councils Are Central to the EPA's Action Strategy

- They ARE the Partnerships we seek
- They Strengthen state programs
  - They use the investments of members
- They transfer technology: Multiple monitoring tools
- They design monitoring programs
- They promote innovative approaches
- They expand access and use of data
  - Encourage comparability of methods and reporting
  - Improve communication of water quality results

# Councils Can Help States Meet EPA Goals for Monitoring

- Almost every *Element* can be done better or be more broadly accepted if done collaboratively by local resource managers
- Councils can help with the following *Elements*
  - Monitoring Program Strategy
  - Core and Supplemental Water Quality Indicators
  - Quality Assurance
  - Data Analysis/Assessment
  - Reporting
  - Programmatic Evaluation
  - General Support and Infrastructure Planning

# Councils Can Help States Meet EPA Goals for Monitoring

- Councils can help frame the *Elements*
  - The Monitoring Program Strategy
    - Can become the *Multi-Agency* Monitoring Program Strategy
  - Monitoring Objectives
    - Can become the *Shared* Monitoring Objectives
  - Monitoring Design
    - Can become the *Consensus* State Design Approach
  - Data Management
    - Showcases STORET. It shines as a common platform allowing different organizations to all store data in one place!



**Purpose:** Provide a national forum for coordination of consistent and scientifically defensible methods and strategies to improve water quality monitoring, assessment and reporting. Promote partnerships to foster collaboration, advance the science, and improve management within all elements of the water quality monitoring community.



- Supporting Councils' Needs
  - NEMI
  - Water Quality Data Elements
  - Encouragement/ Assistance in forming Councils
  - Advocate support for executive secretariat functions
  - Advocacy for special projects

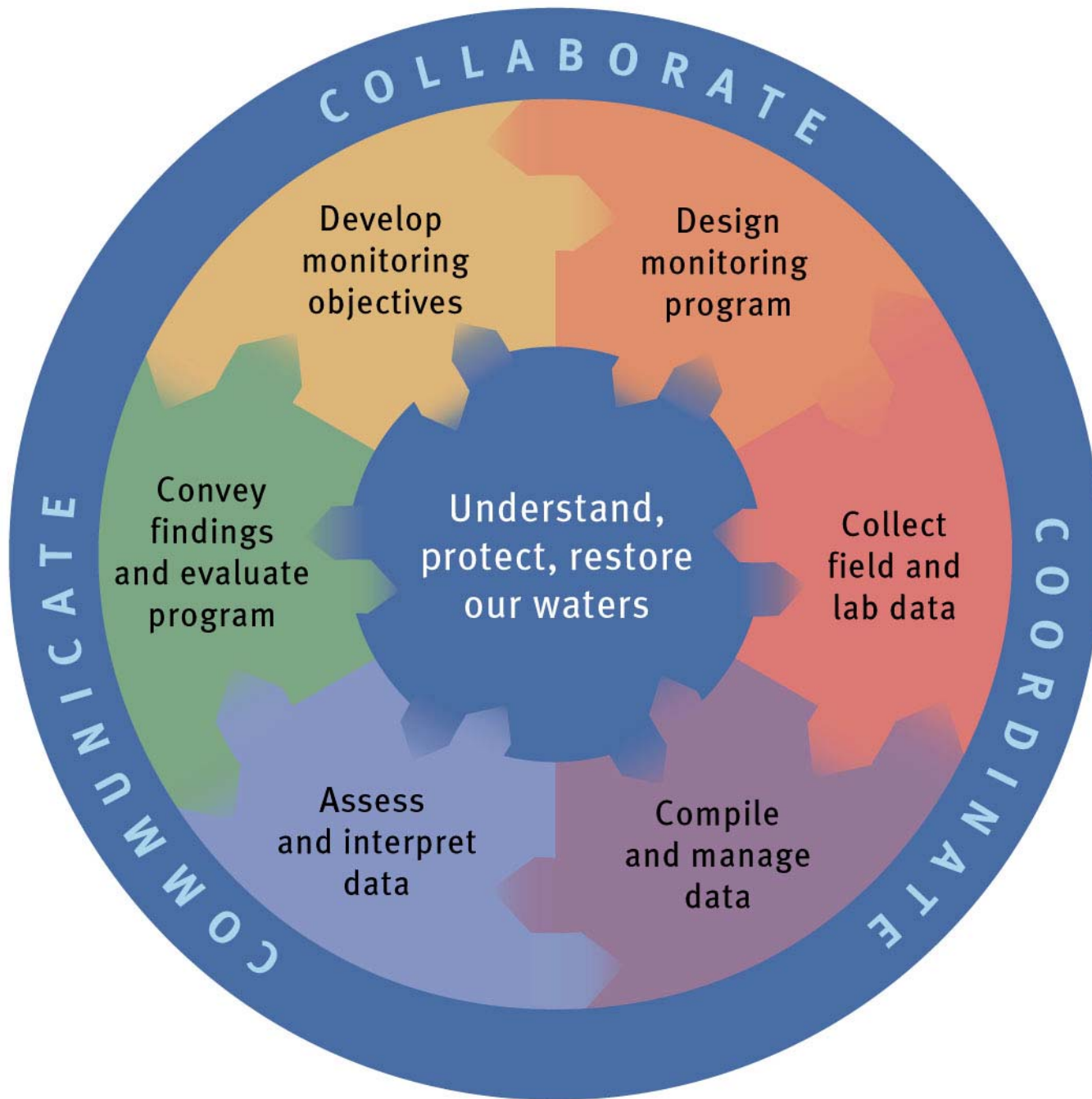
Monitoring inventories

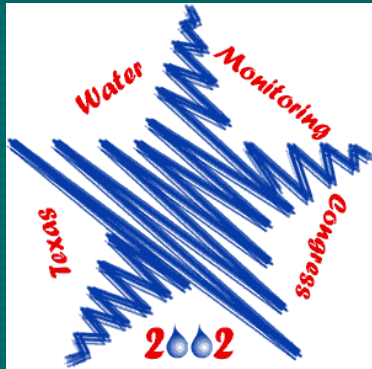
Field methods clinics, other training

Metadata swaps

Cost-effective project planning







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